

What is claimed is:

1. An actuator in which a rotor is rotated within a range of a preset angle in a direction corresponding to a direction of current supply to a stator coil, wherein said rotor includes a column-shaped permanent magnet having surfaces perpendicular to a center line of rotation and a surface surrounding said center line of rotation and a frame body configured integrally with said permanent magnet, said frame body covering two center portions of rotation of said permanent magnet and said surface surrounding said center line of rotation of said permanent magnet so that a plurality of exposed surfaces are provided, each of areas in which said center portions of rotation are covered is provided with a journal supported by a bearing of a stator, and a portion extending in a radial direction from one of said center portions of rotation is provided with an output portion.

2. An actuator according to claim 1, wherein said output portion is parallel to said center line of rotation.

3. An actuator according to claim 2, wherein at a place where each of said center portions of rotation of said permanent magnet is opposite to said frame body covering each of said center portions, a polygonal concavity, on one hand, is provided, and on the other hand, a convexity is configured to project into said concavity and occupy said concavity.

4. An actuator according to any one of claims 1-3, wherein at a place where a surface surrounding said center line of rotation of said permanent magnet is opposite to said frame body covering said surface, concavities, on one hand, are provided, and on the other hand, convexities are configured to project into said concavities and occupy said

5       concavities.

5       5.     An actuator according to claim 4, wherein said permanent magnet is magnetized as two magnetic poles in a radial direction, and at least one of surfaces perpendicular to said center line of rotation has a groove configured along a boundary between said two magnetic poles, said frame body is partially provided in the groove, and said output pin is situated on an extension line of said boundary.

6.     An actuator according to claim 5, wherein said frame body is constructed so that said output pin and another output pin are located at symmetrical positions of 180° of said permanent magnet.

5       7.     A blade driving device for cameras having an actuator in which a rotor is rotated within a range of a preset angle in a direction corresponding to a direction of current supply to a stator coil, wherein said rotor includes a column-shaped permanent magnet having surfaces perpendicular to a center line of rotation and a surface surrounding said center line of rotation and a frame body configured integrally with said permanent magnet, said frame body covering two center portions of rotation of said permanent magnet and said surface surrounding said center line of rotation of said permanent magnet so that a plurality of exposed surfaces are provided, each of areas in which said center portions of rotation are covered is provided with a journal supported by a bearing of a stator, and a portion extending in a radial direction from one of said center portions of rotation is provided with an output pin to be parallel to said center line of rotation.

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8.     A blade driving device for cameras according to claim 7, wherein said actuator is used as a driving source.

9. A blade driving device for cameras according to claim 8, wherein said blade driving device for cameras in which said actuator is used as a driving source is a shutter device for cameras.

10. A blade driving device for cameras according to claim 9, wherein said blade driving device for cameras in which said actuator is used as a driving source is a stop device for cameras.